

ABSTRACT

A translator apparatus is provided with both program code interpreting and translating functionality, where subject program code is interpreted rather than being translated in those situations where interpretation of the subject program code is determined to be more beneficial. The translator applies an interpreting algorithm to determine whether a basic block of subject program code should be interpreted or translated. A particular subject of instructions supported by the interpreter functionality is initially selected from an entire instruction set for the subject program code. A basic block will be interpreted 1) if all of the instructions within a basic block are determined to be within the subset of instructions supported by the interpreter functionality, and 2) if an execution count of the basic block is below a translation threshold. If either of these two conditions are not satisfied, then the basic block is translated by the translator